

# 30% DESIGN TECHNICAL SPECIFICATIONS OUTLINE

## Lower Sluiceway, Shoreline, and Sediment Interim Measure Delaware Valley Works Facility, Claymont, Delaware

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### **DIVISION 00 – PROCUREMENT AND CONTRACTING REQUIREMENTS**

#### 00 01 10 Table of Contents

This specification is a list of all the content included within the technical specifications.

#### 00 01 15 List of Drawing Sheets

This specification lists each sheet of the Contract Drawings.

### **DIVISION 01 – GENERAL REQUIREMENTS**

#### 01 11 00 Summary of Work

This specification includes a site description, description of work, work not included, project schedule, and permit schedule, and it defines the scope of the work associated with the contract.

#### 01 11 05 Remediation Construction Requirements

This specification includes general requirements for construction of remediation projects. Includes procedural and reporting requirements, as well as operational requirements.

#### 01 14 00 Work Restrictions and Sequence

This specification includes what restrictions are placed on access to the site, the use of the site, the work in right-of-way, and schedule restrictions. This section will also summarize the general sequence of operations and restrictions imposed by local ordinances.

01 20 00 Price and Payment Procedures

This specification includes detailed measurement and payment terms for all work items as well as information about product quantities, time allowances, and payment procedures. Measurement associated with payment of a work item will be established in this section and further defined in the appropriate sections detailing procedures for measurement and verification.

01 31 00 Project Management and Coordination

This specification includes requirements associated with project coordination, project meetings, and project communication during performance of the work, and it defines scope and frequency for pre-construction, daily, weekly, and closeout meetings. This section also includes requirements for project communication.

01 32 00 Construction Progress Documentation

This specification includes instructions for the construction progress schedule and the construction progress reporting information. This section also includes requirements for daily and weekly reporting.

01 33 00 Submittal Procedures

This specification provides a submittal schedule, as well as requirements for shop drawings, product data, and samples, and it establishes the criteria for submittal of materials samples for approval prior to use at the site. A table listing all required project submittals with due dates for submittal will be included with this specification.

01 35 29 Health, Safety, and Emergency Response

This specification details the minimum health and safety requirements associated with the contract. The contractor will be required to comply with Occupational Safety and Health Administration (OSHA) requirements, as well as site-specific health and safety requirements of the Honeywell and Chemtrade safety programs. Details will be provided for the contractor's required site-specific health and safety plan (HASP), which will be approved by the site owners prior to start of

- work. Ultimately, the contractor is responsible for the safety of site personnel and subcontractors.
- 01 35 53    Security Procedures  
This specification includes a description of site security procedures the contractor will be responsible for providing throughout the implementation of the work.
- 01 41 00    Regulatory Requirements  
This specification will outline the project permits that the contractor will be required to comply with during implementation of the work. Received project permits will be provided to bidders as an appendix to the Technical Specifications.
- 01 42 00    Definitions and Abbreviations  
This specification defines contract terms and abbreviations used throughout the Technical Specifications package.
- 01 45 00    Quality Control  
This specification includes a description of field quality control procedures and testing and inspection services, and it includes reporting requirements for the contractor's quality assurance/quality control (QA/QC) procedures.
- 01 50 00    Temporary Facilities and Controls  
This specification includes a description of temporary facilities including all temporary utilities. This section will cover the set-up of site staging, stockpile, parking, material management, and laydown areas.
- 01 55 00    Vehicle Access and Parking  
This specification will detail the requirements of truck movements through and exiting the site. Procedures for trucking communication, controls, and routes through the site will be established. Approved trucking routes for disposal of excavated site materials will also be established in this section.

01 57 19 Temporary Environmental Controls and Environmental Protection

This specification includes descriptions, locations, and material requirements for temporary environmental controls required to be used to complete construction. Requirements will be detailed for maintenance, monitoring, and repair of temporary environmental controls.

01 70 00 Execution and Closeout Requirements

This specification includes requirements for closeout and completion of the project, and it includes reporting, inspection, re-inspection, guarantees, warranties, and contractor application for final payment.

01 74 00 Cleaning and Waste Management

This specification includes a description of the cleaning and waste management process throughout construction operations, as well as the final cleaning requirements.

01 78 00 Project Record Documents

This specification includes requirements for the project record documents, including how documents are to be developed, responsible parties, timelines for submittal and review, file management procedures, and electronic filing standards. This section will cover the project design documents, as-built drawings, permits, contractor required work plans, product and materials records, and addenda.

## **DIVISION 02 – EXISTING CONDITIONS**

02 21 13 Surveys

This specification includes requirements for surveys including topographic and bathymetric surveys. This section will dictate survey equipment and establish surveying procedures requirements, as well as survey frequency for each work item.

02 41 00 Demolition

This specification includes requirements for the selective site demolition process. Site demolition will be limited to existing shoreline structures.

02 61 00 Removal and Disposal

This specification includes details pertaining to excavation, handling, characterization, and off-site disposal of site materials. This section will also cover impacted materials removed as part of shoreline and sluiceway remedy implementation. Additionally, debris and construction wastes will be detailed in this section.

## **DIVISION 31 – EARTHWORK**

31 05 13 Soils and Aggregates

This specification includes a description of the specific requirements for the soil and aggregate materials to be used to complete the interim measures.

31 05 19 Geosynthetics

This specification includes a description of the specific requirements for the geosynthetics to be used at the site to support construction. Geosynthetics are anticipated components of the capping systems, construction support, and material storage work elements.

31 11 00 Clearing and Grubbing

This specification includes a description of the clearing and grubbing process, specifically, in the lower sluiceway and shoreline areas. This section will also discuss site preparation necessary for establishing site staging areas, equipment access, support facilities, and remedy implementation.

31 23 00 Excavation and Fill

This specification includes requirements for excavation of sediment in lower sluiceway and grading of shoreline areas. Material requirements for any shoreline

fill necessary to prepare the surface of construction of the capping system will be defined in this section.

31 23 19 Water Management

This specification includes requirements associated with dewatering the lower sluiceway, and this includes any water pumping, diversions, or barriers. Any requirements for water filtration or treatment will also be detailed in this section.

**DIVISION 35 – WATERWAY AND MARINE CONSTRUCTION**

35 10 00 Waterway and Marine Signaling and Control Equipment

This specification includes safety and communication requirements to be used while working within site waterways during in-water project activities. Use of radios and vessel-to-vessel communication will be required. All vessel lighting and signage will be required to be in compliance with U.S. Coast Guard regulations.

35 30 00 Capping

This specification includes detailed requirements for near shore capping including construction sequencing and placement restrictions. Capping system materials, layer thicknesses, placement tolerances, equipment, and verification standards will be established in this section. Required contractor submittals, including work plans and materials samples, will be included in this section.

35 31 16 *Steel Sheet Piling (Tentative)*

This specification includes a description of steel sheetpile materials and installation requirements to be used at the site.